

AIR POLLUTION CONTROL
MINOR SOURCE
PERMIT TO OPERATE

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota, and in reliance on statements and representations heretofore made by the owner designated below, a Permit to Operate is hereby issued authorizing such owner to operate the source unit(s) at the location designated below. This Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Health and to any conditions specified below:

1. Permittee: A. Name: See attached list B. Address: See attached list	2. A. Permit Number: See attached list Renewal No.: Revision No.: B. Permit Description: Synthetic Minor Source: NDAC 33-15-14-03.1.e
3. Source Name & Location: Portable	4. Source Type: Hot-Mix Asphalt Facility
5. Expiration Date:	
6. Source Unit(s):	

Note: These are examples of equipment that could be listed.

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Gencor dryer-drum mixer rated at 500 tons/hr, equipped with a Hauck Starjet burner rated at 150 x 10 ⁶ Btu/hr	1	1	Baghouse or Wet Scrubber
Diesel engine-driven electrical generator set rated at 1034 bhp	2	2	None

CONDITIONS

7. A. **Emission Limits:** Emission limits from the operation of the source unit(s) identified in Item 6 of this Permit to Operate (hereafter referred to as "permit") are as follows. Source units not listed are subject to the applicable emission limits specified in the North Dakota Air Pollution Control Rules.

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit
Dryer-drum mixer	1	1**	PM SO ₂ Opacity	0.04gr/dscf* 3.0 lb/10 ⁶ Btu 20%
Diesel engine-driven electrical generator set	2	2	Opacity	20% (40%***)

* Emission Unit 1 is also subject to the applicable mass emission rates (lb/hr) specified in Chapter 33-15-05 of the North Dakota Air Pollution Control Rules. **(0.04 gr/dscf applies to NSPS facilities)**

** The stack height of the pollution control device for Emission Unit 1 shall be at least _____feet above ground level. **(Stack height is specific to each individual facility)**

*** Permissible for not more than one six-minute period per hour. **(Applies to facilities with engines)**

- B. **Process Restrictions:** For all operations, total production is limited to 500,000 tons in any 12-month period (12-month rolling total). This permit allows operations involving the production of virgin asphalt. In addition, production of mixes containing no more than 20% reclaimed asphalt pavement (RAP) may be produced for dryer-drums equipped with a center feed ring and controlled by a baghouse or venturi wet scrubber. Prior approval from the Department must be obtained before initiating operations with mixes containing more than 20% RAP.
- C. **Fuel Restriction:** Burner fuel for the dryer (EU 1) is limited to natural gas, propane, coal tar oil, distillate oil, residual oil and used oil. The generator set (EU 2) is restricted to combusting only distillate oil containing no more than 0.0015 percent sulfur by weight.
- D. **Used Oil and Residual Oil Fuel Setback Restrictions:** Used oil, as defined in NDAC Section 33-24-05-600 through 33-24-05-699, and residual oil is approved for use as fuel for the dryer burner subject to compliance with the following setback conditions. For the purpose of determining compliance, the distance shall be measured from the exhaust stack for the wet scrubber or baghouse to the nearest occupied building or residence. The following tables indicate proper offset distances in accordance with stack heights and the applicable control equipment.

USE ONE TABLE OR THE OTHER DEPENDING ON BAGHOUSE OR WET SCRUBBER.

Setback Distances for Wet Scrubber Controlled Plants*			
Stack Height (ft)	Residual Oil	Used Oil	Natural Gas, Propane & Distillate Oil
20	400 yards	400 yards	N/A
25	350 yards	350 yards	N/A
30	300 yards	300 yards	N/A
35	200 yards	300 yards	N/A

Setback Distances for Baghouse Controlled Plants*			
Stack Height (ft)	Residual Oil	Used Oil	Natural Gas, Propane & Distillate Oil
20	600 yards	300 yards	N/A
25	550 yards	250 yards	N/A
30	450 yards	200 yards	N/A
35	200 yards	200 yards	N/A

* Setback distances are the minimum distance the dryer stack can be located to any occupied building or residence.

- E. **Used Oil Properties:** Laboratory analysis must meet the criteria for “specification” used oil in accordance with NDAC Section 33-24-05-600 through 33-24-05-699 as listed below.

<u>Constituent/Property</u>	<u>Maximum Allowable Level*</u>
As, Arsenic	5 ppm
Cd, Cadmium	2 ppm
Cr, Chromium	10 ppm
Pb, Lead	100 ppm
PCBs	<2 ppm
HCl, Hydrogen Chloride (Halogens)	1000 ppm
Flash Point	100°F Minimum

* 1 ppm = 1 mg/Kg = 1 µg/g

- F. **Special Conditions for Burning Used Oil:**

- 1) The plant owner/operator shall demonstrate, by a documented laboratory analysis, that the used oil fuel being burned, or to be burned, is in compliance with the applicable plant/stack site location restrictions. Such analyses shall be available for inspection at the plant site.
- 2) The plant owner/operator shall maintain invoice records of used oil fuel received from marketers or suppliers for a minimum of five years.
- 3) The plant owner/operator who burns used oil for energy recovery purposes shall comply with all applicable State Rules and Federal Regulations pertaining to used oil burning activities associated with the plant.

Note: OPTIONAL CONDITION (IF USED, SPECIFY AS AN APPROPRIATE CONDITION AND REDESIGNATE REMAINING CONDITIONS ACCORDINGLY.) (Use in **Anderson Western A90001, Mayo Const. 80003, 83004**)

- G. **Coal Tar Oil Fuel Restriction:** Coal tar oil is approved for use as fuel for the dryer burner provided that the plant is not operated closer than 1640 yards (1500 meters) to any occupied

building or residence, and provided that the listed ingredients or constituents do not exceed the following limits:

<u>Constituents</u>	<u>Maximum Allowable Level*</u>
Cresylic Acid	12.0%
Xylene	2.0%
Toluene	2.0%
Pyridine	1.0%
Benzene	1.0%
Arsenic	1.6 ppm
Cadmium	1.0 ppm
Chromium	3.0 ppm
Nickel	1.0 ppm

* 1 ppm = 1 mg/Kg = 1 µg/g

- H. **New Source Performance Standards (NSPS):** The owner/operator shall operate the hot mix asphalt facility in accordance with 40 CFR 60, Subpart I as incorporated into NDAC 33-15-12. (Use only if plant is subject to NSPS)
- I. **Odor Restrictions:** The owner/operator shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33-15-16.
- J. **Posting of Permit:** A copy of this permit shall be posted in the control room of the plant.
- K. **Operation of Air Pollution Control Equipment:** The owner/operator shall maintain and operate all air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
- L. **Source Operations:** Operations at the facility shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or renewal application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.
- M. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17.
- N. **Air Pollution from Internal Combustion Engines:** The permittee shall comply with all applicable requirements of NDAC 33-15-08-01 – Internal Combustion Engine Emissions Restricted.
- O. **Nuisance or Danger:** This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.
- P. **Monitoring and Recordkeeping:** The owner/operator shall record the tons of asphalt concrete produced each month and determine the total tons of asphalt concrete produced during the

previous 12-month period. Any time the amount of asphalt concrete produced during the last 12-month period exceeds the allowable limit, the owner/operator shall notify the Department within 10 working days. The records regarding the amount of production shall be retained for five years and submitted to the Department upon request.

The sulfur content of any liquid burner fuel used shall be analyzed with each shipment. The sulfur analysis for the fuel may be conducted by the owner/operator or by the source where the fuel is purchased. If fuel supplier certification for sulfur content is used, the owner or operator shall obtain a written statement from the supplier which includes the name of the supplier and the sulfur content of the fuel. The owner/operator shall maintain records of all fuel purchased and average sulfur content of the fuel for a period of five years. The owner/operator shall report the fuel use and sulfur content to the Department upon request.

- Q. **Annual Emission Inventory/Annual Production Reports:** The owner/operator shall submit an annual emission inventory report or an annual production report, upon request, on forms supplied or approved by the Department.
- R. **Malfunction Notification:** The owner/operator shall notify the Department as soon as possible during normal working hours of any malfunction which can be expected to last longer than twenty-four hours and can cause the emission of air contaminants in violation of applicable rules and regulations. Immediate notification to the Department is required for any malfunction that would threaten health or welfare, or pose an imminent danger.
- S. **Change of Status Notification:** The owner/operator shall notify the Department as to the approximate starting date and location of all projects involving the production of asphalt concrete in the State of North Dakota. A subsequent change in location or operating status is to be reported to the Department within 48 hours of the change via Form AP 205 or by telephone. Locations should be selected that will minimize any adverse effects of plant operations on nearby houses/residences.
- T. **Alterations or Changes in Operation or Location:** Any alteration, rebuilding, repairing, expansion, or change of location of the source which results in the emission of an additional type or greater amount of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, rebuilding, repairing, expansion, change in the method of operation, or change of location.
- U. **Change of Ownership:** This permit may not be transferred without prior approval from the Department.
- V. **Right of Entry:** Any duly authorized officer, employee or agent of the North Dakota Department of Health may enter and inspect any property, premise or place at which the source listed in Item 3 of this permit is located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have

the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

- W. **Permit Renewal and Invalidation:** This permit shall be effective from the date of its issuance until the date specified in Item 5 unless sooner suspended, revoked or surrendered. Upon suspension or revocation, the permit shall be returned to the Department. Application for renewal of this permit shall be submitted ninety days prior to such expiration date. The Department shall approve or disapprove the renewal of the permit within ninety days of receipt of the renewal application.
- X. **Other Regulations:** The owner/operator of the source unit(s) described in Item 6 of this permit shall comply with all State and Federal environmental laws and rules. In addition, the owner/operator shall comply with all local burning, fire, zoning, and other applicable ordinances, codes, rules and regulations.
- Y. **Permit Issuance:** This permit is issued in reliance upon the accuracy and completeness of the information set forth in the application. The conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.
- Z. **Sampling and Testing:** The Department may require the owner/operator to conduct tests to determine the emission rate of air contaminants from the source. The Department may observe the testing and may specify testing methods to be used. A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the owner/operator shall follow the procedures and formats in the Department's Emission Testing Guideline.

FOR THE NORTH DAKOTA
DEPARTMENT OF HEALTH

Date _____

By _____
Terry L. O'Clair, P.E.
Director
Division of Air Quality